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EDITORIAL

THE PRACTICE OF MEDICINE TODAY.

A student of the statistics of the medical practitioners of this country not many years ago figured that forty per cent. of all graduates in medicine abandoned their calling after five years' experience in it. Under these statistics, the average income of the doctor in the United States was one hundred dollars a month. With the higher standards for entrance and for advancement in medical schools, the number of graduates has been reduced about one-half since the time when those statistics were presented. The status of the medical man in the United States has improved materially, as a result.

Educators themselves are not yet sure of the best way to train men to enter the field of medicine and a variety of experiments has been and is being conducted with the idea of stabilizing medical education.

Better trained students make better doctors and the requirement

of a college education before the study of medicine begins has brought to the medical schools more earnest and more intelligent students.

The fact stands out that the purpose of a medical school is to train men to practice medicine. No means should be spared to afford the student every opportunity of acquiring modern scientific methods, in diagnosis and in the treatment of disease; but it is not the function of the medical school to require of every student so high a scientific training as to render him useless in the final test of the physician at the bedside.

In an analysis of the graduates from one of the leading medical schools in this country, over a period of five years, the rather interesting fact was presented that only four per cent of the output was located in small towns or in country districts; ninety-six per cent had gravitated to the larger cities.

The plea comes repeatedly for the consideration of two classes or sorts of medical graduates, one to meet the demands for the country practitioner and the other to meet the standards which seem to necessitate, as the finished type, the ultra-trained in diagnosis and in particular fields of practice. No such separation of classes can occur, with the modern conception of a medical education, but the discussion points to the need of a better training for the student in the practical side of medicine, so that he may, when graduated, meet the needs for the general practitioner. The solution is partly on the way in the establishment of higher grade graduate schools. Here research departments, with provisions for special training in the more advanced branches, promises better trained specialists.

The experience at the Officers' Training Camps of the Army in determining the fitness of thousands of self-styled specialists showed how lamentable conditions were among men who, after a few months in a metropolitan clinic, had returned to their homes as specialists and then permitted the indulgent public to suffer through their mutual ignorance.

Within the past ten years the whole structure of medical education in the United States has been recast and today there is too much tendency to standardize upon a basis of a stereotyped theory, not based upon practical experience.

The science of medicine has consistently travelled faster than the art of medicine. It may soon be evident that the art of medicine will have been left so far behind that its place may be overlooked.

This must prove unfortunate, for the sole purpose of medicine, in or out of the medical school, is the prevention and the cure of disease. Modern society, in its rapid phases of developing civilization, brings newer diseases, or more variant types of older diseases and the general problem for the physician does not materially change, for there can be no time when all diseases may be absolutely prevented.

The division of medical effort in medical organization is certain to come about; it is already on the way. Philanthropic bodies, among which the Rockefeller International Health Board stands in stellar place, already are engaging the attention of medical schools in training men for health salvage and disease prevention, and the output has not yet kept up with the demand for such men. State Health Boards and the envisaged Department of Public Health in the Federal Government will more and more demand specially trained graduates in medicine, particularly selected for work in preventive medicine. The differentiation of a considerable percentage of graduates into special fields of practice will further diminish the rank and file of the much needed general practitioner who must care for the every day sick—but these must be better qualified than ever to take care of the bulk of the public who will always need the doctor.

The economics of supply and demand and the related question of adequate compensation for services must yet be solved. Just now it is an individual equation, based usually upon the physician's own statement of the value of the service he renders and upon the ability of the patient to pay. Even at best, the pay is not commensurate, when the intelligence and responsibility of services are weighed. No other profession is as lavish of its service, nor so considerate in its demands on those who should pay. The compensation for proletarian service must soon be assumed by the state, which must also soon solve the matter of adequate medical care of the smaller communities.

The Health Insurance plan of Great Britain offers a basis for contemplation—but this country must consider a broader plan, which will care for the wages of those physicians who may be willing to serve the state in the care and cure of the sick, as well as in preventing disease. The state assumes to regulate the practice of medicine, determining licensure and the obligations of the doctor to the state in the reporting of certain diseases, but the state as yet does not

compensate for the service. Hospitals are no longer the refuge of the pauper only; more and more they are becoming the place of choice for those who are sick and who need care and where municipalities exercise any provision at all, they are taking into consideration the future demand for community care, of those who are willing and able to pay.

These are problems in State Medicine, which are paramount today and which merit thoughtful reflection and consideration for future action.

ORIGINAL ARTICLES

(No paper published or to be published in any other medical journal will be accepted for this department. All papers must be in the hands of the Editors on the tenth day of the month preceding that in which they are expected to appear. Reprints may be had at reasonable rates if a WRITTEN order for the same accompany the paper.)

UTERINE FIBROIDS COMPLICATING PREGNANCY.

By AIMÉ PAUL HEINECK, M. D., Chicago, Illinois.

During pregnancy, women are subject to many pathological conditions that influence gestation, parturition, and sexual life. When of a surgical nature, such conditions find in pregnancy no contra-indication to the application of surgical principles, e. g., appendicitis being met by appendectomy; cholecystitis and cholelithiasis by cholecystotomy or cholecystectomy, either being considered routine performance.

There arises, however, in the course of pregnancy a condition to which obstetricians, gynecologists and surgeons have given an entirely inadequate amount of study, namely, the occurrence of uterine fibroids.

Uterine fibroids afflict all races. They originate during menstural life and are more frequent than ordinarily suspected. When they occur in pregnancy, two lives are at stake; therefore, the subject is well worth being brought to the special attention of the medical profession.

The opinions expressed in this paper are based on my personal experience supplemented and controlled by an analytical survey of 380 cases reported with adequate data in which the diagnosis received either operative or post-mortem confirmation. The following observations offer themselves:

Any part of the uterus may be the seat of a fibroid; even the entire uterus may undergo myomatous degeneration.

Uterine fibroids are found associated with any form of pregnancy and occur in gravid uteri, otherwise normal or abnormal, congenitally so or acquired.

Uterine fibro-myomata exert an unfavorable influence upon conception, gestation, labor, and the puerperium.

Uterine fibroids originate and may continue during all periods of

menstrual life, may first become manifest in primiparæ, deutiparæ, and multiparæ as is evidenced by the following table:

Primiparæ	101
Deutiparæ	30
III-paræ	12
IV-paræ	8
V-paræ	7
VI-paræ	6
VII-paræ	3
VIII-paræ	3
IX-paræ	1
XI-paræ	1
XIV-	1
Not Stated	207

The youngest patient was 19 years old: the oldest three each, 45 years old.

19 to 24 years inclusive	17
25 to 29 years inclusive	54
30 to 34 years inclusive	84
35 to 39 years inclusive	76
40 to 44 years inclusive	37

Fibroids vary in number, location, size, anatomical relation, and also in shape, consistency, structure, mode of implantation, and rate of growth.

The uterus has been found to be the seat of fibroids originating in the cervix, in the body, or in both body and cervix. 154 of the cases under consideration presented one fibroid; 22 cases, two fibroids; and 56 cases several fibroids.

Cervical fibroids are of rarer occurrence than those of the corpus. Among the cases herein considered, one notes 25 of the former to 129 of the latter. The cervical variety arises from any part of the cervix; may or may not invade the cervical canal; and frequently burrows under the peritoneum on the anterior or posterior aspect of the uterus. Submucous cervical fibroids not uncommonly prolapse into the vagina. Of the corpus fibroids, 12 originated in the cornu, 39 in the fundus, 44 in the anterior wall, and 44 in the posterior wall; in 8 cases, they occupied several parts of the body.

A classification serviceable alike from an anatomic, diagnostic and therapeutic viewpoint, is based on the relation of the tumor to the various layers of the uterine wall. Thus fibroids are designated subperitoneal, interstitial or intra-mural, and submucous. The subserous and submucous types are sessile or pedicled. In many cases, more than one uterine layer is involved, and in a few, the whole uterus appears to have undergone fibro-myomatous degeneration.

The following table indicates their reported distribution:

	Cervix	Body
Subperitoneal	2	66
Interstitial	29	74
Submucous	8	29

Pedicles vary in thickness and length, and at times undergo torsion. The latter is a rare accident; few pedunculated fibroids having a pedicle long enough to allow of rotation.

Uterine fibroids by virtue of their weight, volume, or location displace and fix the pregnant uterus forward, laterally, upward, downward or backward, causing pathological versions and flexions, and even pelvic impaction and incarceration. Such displacements are temporary in the beginning, but become permanent when inflammatory adhesion of the tumor to neighboring structures or organs takes place. Retro-uterine fibroids adherent to the pelvic floor will often be found as immovable as intraligamentous tumors.

When pregnancy develops in a myomatous uterus, the nutrition of the fibroids is unfavorably influenced by the altered conditions and hypertrophy of the tumor results. The hypertrophy of the tumor is an effect of the increased vascularity and of the increase in number and size of the tumor cells. The softening being largely due to edematous infiltration of the neoplasm, allows changes in the shape of the tumor such as flattening against the uterus, against the pelvic walls, etc.

Fibroids like other tissue masses are subject to inflammatory and degenerative changes. These changes occur previous to, or after abortion, or premature labor; previous to or after full-term labor. Owing to their low vitality, fibroids offer little resistence to invading germs, either implanted upon, or conveyed to them from the uterine cavity, or elsewhere,[10] by way of the lymphatic or blood-vessels. Inflammation of a fibroid terminates in gangrene, partial or complete, central or peripheral; in suppuration,[5] or in the formation of adhesions. Adhesions of inflammatory origin by displacing and fixing the gravid uterus interfere with its functions and that of contiguous viscera, and are an important factor in the etiology of dystocia. Adhesive inflammation may bind the tumor to one or more organs[41] and structures,[9 12 19 24] intestines,[39] Douglas' Pouch,[38 42] and to the abdominal wall.[41]

Gangrene is due to different factors: circulatory and nutritive disturbances, pressure within or outside of the uterus, lessened leucocytic defense and ease of infection of neoplastic tissue.

Fibroids are subject to calcification, to fatty, cystic, myxomatous, or red degeneration. Degeneration occuring in the interior of the fibroids can lead to grave peripheral complications. Red degeneration of fibroids is an aseptic necrobiotic process characterized by hemolysis and autolysis of tissues. The tissue of the fibroid becomes necrotic and refuses to stain, and presents on section a raw-meat, brown or mahogany color which darkens on exposure to the air. The color is due to laking of blood in the necrosed tissue and diffusion of blood pigment into the cells. Red degeneration occasionally met in non-gravid myomatous uteri, is more frequent, more intensive in uterine fibroids co-existing with or complicating pregnancy. In over fifteen cases herein considered, one or more of the fibroids had undergone red degeneration.[14 20 4]

The process of red necrosis may advance to complete liquefaction of tumor with rupture of either into the peritoneal or uterine cavity, and secondary infection. In four cases, distinct evidence of cystic degeneration was present; the cyst wall being formed by the capsule and the periphery of the tumor; the cyst contents, by a chocolate colored fluid.[28]

Pathologic conditions co-existing with uterine fibroids are either purely co-incidental or determined partly or wholly by the neoplasm. The frequent association of uterine fibroids with localized peritonitis[32] and with disease of the uterine appendages is too well known to call for more than passing mention.

Purely co-incidental pathological conditions are recorded: appendicitis, ovarian cyst, torsion of the pedicle of a dermoid ovarian cyst, intraligamental ecchinoccus cyst, carcinoma of the cervix, etc.

Without repeated examination, the diagnosis of uterine fibroids and co-existing pregnancy is difficult to establish. The signs of pregnancy may be mimicked by fibroids and vice versa; e. g., uterine souffle, bluish discoloration of the vaginal wall, Braxton-Hicks intermittent uterine contractions; ballottement and abdominal palpation often give analogous findings in pregnancy and uterine fibroids.

Pressure upon the vascular channels is provocative of an oedema involving the legs; upon the nerves of the sacral plexus, of pain; upon the intestines, of intestinal obstruction; upon the rectum, of rectal tenesmus, constipation and diarrhea. Pressure upon the kidneys and ureters, anuria and uremia. Pressure upon the

bladder is followed by vesical tenesmus, frequent, painful and difficult micturition, and in some cases, by retention of urine.

Inflammation and degeneration occurring in fibroids determine local and constitutional symptoms. All degenerations, all acute inflammations of fibroids give rise to pain,[18] varying in duration and intensity according to the extent, acuity, and nature of the pathological process. The pain may be severe enough to necessitate the use of opiates.[29] Closely associated with pain is tenderness. During pregnancy, degeneration should be suspected whenever a uterine fibroid becomes tender and painful. The fever, pain, and tenderness present in uterine fibroids are provoked by one or the association of two or more of the following factors:

1. Rapid and sudden increase in size of tumor, as in edematous infiltration.[34]
2. Serious mechanical pressure exerted by the new growth upon the rectum, bladder, and ureter.
3. Pelvic impaction and incarceration of tumor.
4. Bacterial inflammation of myoma or myomata, phlegmonous, suppurative or gangrenous in type.
5. Degeneration of tumor, cystic, red, etc.
6. Torsion of tumor's pedicle.
7. Torsion of tumor's pregnant myomatous uterus on its long axis.
8. Peritonitis, localized or diffuse.
9. Simultaneous adnexal disease, with or without peritonitis.
10. Impending abortion or premature labor.

A fibroid is a deformity, and if bulky may cause bulging and asymmetry of one or more abdominal regions. Abdominal and vagino-abdominal palpation enable us to obtain suggestive or fairly accurate information relative to the size, shape, consistency, mobility, and anatomical relations of uterine fibroids. A co-existing pregnancy makes the interpretation of the palpatory finding more difficult.

Uterine fibroids influence fertility even before they produce subjective symptoms, to what extent is not as yet fully determined. In married myomatous patients, sterility is more common and fertility rarer than in married women of a corresponding age with normal uteri. Fibroids may so displace the cervix that it is not bathed in seminal fluid during the sexual act; they may obstruct

the uterine cavity and compress the interstitial portion of the tube. Small subserous myomata do not diminish the capacity to conceive. In a general way, the chances of conception diminish in proportion to the size of the tumors and to their influence upon the uterine mucosa. Submucous fibroids determine the greatest endometritic disturbances:—atrophy, changes in the uterine glands, inflammation, etc., and therefore, of all fibroids, they are the most frequently associated with sterility.

A woman is more liable to conceive after the successful removal of fibroid or fibroids. Women having uterine fibroids conceive less often and frequently their first gestation occurs at a later period of life than in women with normal uteri. There may be an interval of many years between the pregnancies in fibro-myomatous uteri; from three to seventeen years in the cases we analyzed.

During its entire course, uterine fibroids are a grave menace to pregnancy. They frequently cause abortion, premature labor, or death of fetus with retention of ovum in utero. A placenta partly implanted upon a submucous or an interstitial fibroid does not develop normally.[13] Placenta accreta, partial detachment of the ovum, etc., may result. If the chorionic villi become imbedded upon a part of the mucosa covering a fibroid, the placental development and incomplete nutritive changes resulting therefrom is abnormal: the ovum may atrophy and the fetus die. "The seed has not fallen on good ground."

All uterine displacements, retroversion, retroflexion, prolapse, etc. and all uterine tumors predispose to abortion and premature labor. Pelvic incarceration, pelvic impaction, inflammatory adhesion of the fibroid or fibroids to pelvic structures impede the enlargement and ascent of the pregnant uterus. Important in the causation of abortion are the inflammatory and degenerative changes to which neoplasms are subject. It goes without saying that the cause of sterility and of abortion that obtain in women with normal uteri are equally operative in myomatous women.

The hemorrhages accompanying uterine fibroids bear no fixed relation in amount, duration or frequency to the size of the tumor; they always interfere with the growth of the ovum. A hemorrhage may be insufficient to detach the ovum, and yet cause marked disturbance in the utero-placental circulation. Abortion attended by hemorrhage, more or less severe, may be caused by a pedicled submucous fibroid insinuating itself into the cervical canal.

"When a woman with a uterine fibroid conceives, it is certain that her life is in jeopardy, and not only as long as the fetus remains within, but also when it is expelled, whether it occurs prematurely or at term."[4] The danger to the child's life is proportionate to the nature of the obstruction, duration of labor, and method of delivery. Fibroids cervical or corporeal, intensify the discomforts of pregnancy to such a degree that at times operative relief becomes imperative. According to Scipiades, in the myomatous cases that go to term, the first stage of labor is prolonged, the second very painful, and the third more abnormal in 21% of the cases. Fibroids retard and arrest the expulsion of a living or dead child through the natural passages, and not uncommonly demand the employment of radical means of delivery. Delivery per vias naturales in certain cases of retro-uterine or retro-cervical tumors is impossible. A large tumor may so deviate the uterine axis that the presenting part does not enter the pelvic brim, and an abnormal fetal presentation results. The presence of one, two, or more tumors and the resulting poor accommodation of the fetus to the maternal passages not infrequently cause faulty or vicious fetal presentation: shoulder,[6] left sacro-anterior,[3] foot,[17] breech, [30] transverse.[40]. Fibroids by their volume,[17] and their location may obstruct the maternal passages, prove a bar to normal labor,[23 13 32] and necessitate suprapubic delivery to save the life of either the child or mother or both.

A low-down cervical tumor may prevent dilatation. Blocked labor if unrelieved may result in the rupture of the uterus. Uterine fibroids interfere with and weaken uterine contractions;[1 27] not uncommonly, they cause uterine inertia,[22] and thereby prolong labor. Intra-mural myomata occupying a great part of the uterine wall, may prevent uterine contraction and retraction. Uterine inertia, impaired uterine contractility and retractility, pathologically adherent placenta, tortuosity of the cervical canal, make retention of placental tissue and post-partum hemorrhages common in myomatous uteri.

Placenta previa and adherent placenta are unusually frequent in pregnancy associated with uterine fibroids. Changes in the uterine mucosa incident to the presence of fibroids and insertion of the ovum upon the tumor often cause the placenta to be abnormally adherent. The pathological adhesions interfere with the spontaneous expulsion of the afterbirth and may necessitate manual[21 25] or instrumental separation of the placenta.[42] In fibroids complicating pregnancy,

the post-partum and puerperal hemorrhages may be abundant, even fatal.[16] It is not due to retained placental tissue; it may be due to atony of the uterus, or to the fibroid itself.

During the puerperium, fibroids delay involution, predispose to thrombo-phlebitis, obstruct the lochial flow, and often become infected and necrotic from injury incident to delivery. Purely obstetrical assistance as forced delivery or extraction past the tumor entails the danger incident to contusion or embolism. Immediately after delivery, there ensue in uterine fibroids, circulatory and degenerative changes predisposing to infection. The frequent infections of submucous fibroids is due partly to their location and partly to the bruising of their pedicle by the child's passage through the parturient canal.

The spontaneous expulsion of submucous fibroids into the vagina is accompanied by free bleeding and has been mistaken for a miscarriage. It is observed chiefly at labor and during the puerperium, in connection with small-based submucous fibroids.

Treatment.

In uterine fibroids complicating pregnancy, that treatment is most successful which best fulfils the following three conditions:

1. The delivery of a living and viable child.
2. The complete removal of all fibro-myomatous tissues.
3. The restoration of the mother to sexual and anatomical integrity.

Expectant treatment has dangers, viz., postponement of the climacteric to fifty odd years, formation of submucous nodules, causing repeated hemorrhages, cardiac degeneration, thrombosis and embolism, and malignant degeneration of tumor tissue. It is unsurgical to abandon the patient to the uncertain, though at times favorable influence of the menopause on the course of fibroids. Fibroid tumors of the uterus are a surgical disease, and like neoplasms in other organs are amenable only to operative removal. Surgery eliminates the danger of sepsis, be it puerperal or other following degenerating, bruised, or infected myomata and averts many complications resulting directly or indirectly from fibroids.

The tolerance of the gravid uterus to operative procedure is known. When a uterine fibroid gives rise to symptoms that lead to detection, there is considerable likelihood that the underlying disturbances will endanger the patient's health and life. It being agreed that operative treatment is called for in fibroid complicating

pregnancy, the next thing to determine is when to operate. Early operation allows conservative procedures where delay may entail the sacrifice of the uterus. At the end of pregnancy, a woman is in an unfavorable state of health for a major operation. Operative intervention is imperatively indicated in the presence of the following:

1. Bad general condition of mother. Often myomatous patients are first seen in a deplorable general condition, the result of hemorrhage, accompanying disease of the endometrium, adnexa, or peritoneum, conjointly or separately.
2. Intolerable pain.[34 41 38]
3. Inability to work.
4. Dyspnea due to size of tumor.
5. Rapid growth of tumor.[38]
6. Extreme abdominal distention.
7. Renal insufficiency.
8. Pelvic incarceration or pelvic impaction of tumor.
9. Repeated and profuse hemorrhages.
10. Torsion of tumor's pedicle.
11. Rotation of the uterus on its long axis.
12. Gangrene of tumor, partial or complete, central or peripheral.
13. Tumor degeneration, cystic, red, etc.
14. Septic complications.
15. Severe pressure on neighboring organs, ureter, bladder, rectum, etc.
16. Size and multiplicity of fibroids impending the normal progress of pregnancy.
17. Fibroids that are a hindrance to birth through the normal channels (in these cases, forceps and version are contra-indicated.)
18. Fibroids in the body of the uterus interfering with the uterine contractions.
19. Fibroids interfering with the outflow of the lochia.
20. Fibroids springing from the back of the lower segment of the uterus.

The following operative procedures have been advised:

1. Induction of abortion or premature labor.
2. Myomectomy.
   - (a) Vaginal:
     - (1) By morcellement.[44]
     - (2) Pedicle ligated and tumor removed.

(b) Abdominal: (1) Tumor freed from surrounding organs and pedicle ligated.
(2) Enucleation.

3. Cesarean Section.
(1) Not immediately preceded or followed by any other operative act.
(2) With myomectomy.
(3) With hysterectomy.

4. Hysterectomy.
(a) Vaginal.
(a) Less disturbing to the statics of the pubic organs.
(b) Abdominal.
(1) Supra-vaginal. (b) Of easier and more rapid execution.
(c) Lower morbidity and mortality.
(2) Total. (a) If cervix is myomatous or otherwise diseased.
(b) If there are any suspicions of malignancy.

Abortion.

Abortion accidental or induced exerts no curative influence on the treatment of uterine myomata. It is an illogical operation as it sacrifices the product of conception and in no wise protects the mother from the perils of fibroids. There are dangers incident to abortion:

1. Hemorrhage from myomatous uteri is at times alarmingly profuse and difficult to control.
2. Retention of the decidua and impeded escape of blood and lochia are caused by the displacement of the cervix and the distortion of the uterus.
3. Retained placenta can be due to various factors: the existing tortuosity of the cervical canal, defective uterine contractility and retractility, pathologically adherent placenta, etc.

4. Susceptibility to post-abortive sepsis is increased in cases of this nature.
5. Subinvolution is engendered by the presence of fibro-myomata in the uterine wall.

MYOMECTOMY.

Myomectomy has been successfully performed on gravid uteri at all periods of gestation and pregnancy has continued uninterrupted; has also been done at time of labor and during the puerperium. There are two objections to myomectomy, (1) it does not prevent recurrences; (2) it carries with it the possibility of uterine rupture in future gestations.

For the performance of myomectomy, the operator has the choice of two routes, vaginal and abdominal. The vaginal route has a limited field of usefulness. It is the operation of election.

1. In cervical fibroids,[45] interstitial or pedicled;[20] the latter are easier of access.
2. In long-pedicled submucous fibroids of the body protruding through the cervical canal.
3. In fibroid polypi causing lochiometra.

In a word in all cases of cervical fibroids pedunculated or sessile so situated that their vascular supply can be completely controlled by the operator.

The vaginal route is contra-indicated in the presence of:

1. Disease of the uterine adnexa.
2. Intestinal adhesions to the myoma.
3. Of malignant changes in the tumor.
4. Of myomata that can be drawn into the vagina.

For myomectomy as well as for Cesarean Section and Hysterectomy, the abdominal route is preferable because:

1. It gives the operator a clear view of the operative field.
2. Allows separation of adhesions.
3. It gives full control of bleeding points.
4. It furnishes better access to tumor or tumors.
5. It enables the operator to adapt the operative procedure to the case in hand.
6. It facilitates the correction of any associated abdominal pathological condition.[26]

(Grad in his case shelled out three fibroids and removed an ovarian cyst. Eight months later, normal delivery.)

Myomectomy vaginal or abdominal is a conservative non-mutilat-

ing operation. Though presenting difficulties in interstitial and intraligamentary tumors, it is as a rule of easy and rapid execution, presenting few hemostatic difficulties. When feasible, it is the ideal operation for uterine fibroids. The operator must not disregard the pathological fact that a small nodule left behind may grow to a large tumor before the end of pregnancy.[7] Myomectomy is preferred to hysterectomy, abdominal or vaginal, total or supra-vaginal, because:

1. In the sterile woman, the uterus being left intact, conception may follow. Though pregnancies after myomectomies are not frequent, nevertheless, the hope of pregnancy is not illusory.
2. In the pregnant woman, it removes the disturbing symptoms and cures the condition. Especially are conservative measures indicated in women below 40 years of age whose uteri are not studded with fibroids and who are willing to face the probability of a second operation.
3. It gives gestation the opportunity to continue. After myomectomies, give opium to prevent abortion.
4. It permits the delivery of the child through natural passages.
5. The post-operative shock is milder, the convalescence shorter (especially after vaginal myomectomy) and the mortality rate for both mother and child is lower.
6. The menstrual and generative functions of the mother are retained. "Unable to push the tumor out of the pelvic brim, etc."[37]
7. If after the initial incision, myomectomy is found unsafe or impossible because tumor is too large, too adherent or too deeply imbedded, no harm has been done and the appropriate operative act may still be performed.

Cesarean Section.

As pregnancy approaches its completion, the delivery of a living child becomes a new factor. In gravid myomatous uteri, Cesarean Section is indicated near or at term in all cases in which delivery through the natural passages:

1. Would contuse the tumor, thereby predisposing it to infection and degeneration.
2. Would be extremely difficult as in the presence of large and multiple fibroids interfering with uterine contractions.
3. Would be mechanically impossible.

4. Would inflict serious traumatism upon the maternal tissue or endanger the mother's life or future well-being.
5. Would jeopardize the life or health of the child.

To combat one or more of the aforenamed anomalies, sixty-five Cesarean Sections were performed; they yielded fifty-nine live babies in fifty-five single, and three twin pregnancies. In the course of a Cesarean Section on a myomatous uterus, myomectomy, if feasible, is indicated.

Fibroids are a dangerous element in an involuting uterus. The benefits resulting from their removal far outweigh the risk to tumor enucleation or abortion. The mobility and pliability of the recently delivered uterus, facilitate access to and control of the wounds left by excised myomata. The strongly retractile state of the uterine wall lessens the hemorrhage incident to enucleation. After Cesarean Section, the cervix must be patulous; at times the free escape of the lochia is assured only by artificial dilatation of the cervix. In thirty-eight cases, Cesarean Section was supplemented by hysterectomy. Nineteen of these were total; fifteen, subtotal or supra-vaginal. In four cases, Cesarean section and delivery of child were followed by supra-vaginal amputation of the uterus and adnexa, and the cervical stump was anchored to the lower angle of the abdominal wound (Porro operation).

HYSTERECTOMY.

In the treatment of fibroids complicating pregnancy, hysterectomy is a procedure of necessity. It is a radical mutilating operation, justifiable:

1. If the woman is near the menopause.
2. If enucleation prove impossible, because of location, volume, multiplicity of tumor or general myomatous degeneration of the organ, and if the tumor be of such dimensions and so situated that neither delivery per vias naturales nor progression to full term is possible.
3. If the patient is unwilling to undergo the risks incident to child bearing and refuses to wait for Cesarean section.
4. After Cesarean section to prevent pregnancies that would unduly endanger the maternal life; (contracted pelvis, rupture of the uterine scar, etc.) Hysterectomy avoids all future obstetrical complications while the following two possibilities militate against Cesarean section; (a) the seeping of uterine

fluids into the peritoneal cavity; (b) spontaneous rupture of the uterus at site of the scar or near the same during another pregnancy.

5. If the cervix is distinctly abnormal by reason of lacerations, ulcerations, inflammation, or if there be the slightest suspicion of malignancy; in these cases, hysterectomy should be total.
6. If after enucleation bleeding is profuse and not otherwise controllable.[46]

In hysterectomy total or supra-vaginal, the operator has the choice of two routes, abdominal and vaginal. For the condition under consideration, the latter is rarely employed. The removal of the uterus may be accompanied by the unilateral or bilateral removal of the adnexa. Unless diseased, the appendages should be left. When hysterectomy is to be performed, the supra-vaginal operation is to be selected, if it permits the total removal of the tumor. It is recommended to cut close to the vaginal insertion in order to avoid opening the ovum and the resulting outflow of liquor amnii.

Total hysterectomy is an operation of difficult technique and of some dangers. In 137 cases in which hysterectomy was performed (26 total, 111 supra-vaginal) there were ten maternal deaths.

REFERENCE.

1. Allen, E. S. Large gangrenous submucous fibroid from cervical construction (complicating pregnancy.) *Ky. Med. J.* 11:255, 1913.
2. Andrews, Russell. Myomectomy during pregnancy. *J. Obst. Gyn. Brit. Emp.*, 17:569, 1910.
3. Beck, A. C. Fibromyoma complicating pregnancy and labor. *Am. J. Obst.*, N. Y. 75:498. Case Report, 1917.
4. Bland-Sutton, Sir. J. "Red Degeneration of Uterine Fibroids Complicating Pregnancy." *Brit. Med. Jour.* 1909. **Vol. I, p. 147.**
5. Brickner, Sam'l. N. "Multiple Fibroids Complicating Pregnancy; Hysterectomy, Recovery." *Am. J. Obst.* Case Report. 65:645, 1912.
6. Bué, M. V. "Fibrome et Grossesse; Opération de Porro. Case Reports. *Bull. Soc. d'Obst. Gynéc. de Paris.*. 13:353. 1910.
7. Carmichael, E. Scott. "Two Cases of Tumors Complicating Pregnancy." *J. Obst. & Surg. J.* 161-292:294, 1910.
8. Carroll, H. R. Placenta Praevia Centralis Complicated by Fibroma of Uterus. *Lancet Clinic.*. 111:231, 1914.
9. Chiaje, Della. "Fibromes Sphacélés Pendant les Suites de Couches. *Bull. Soc. d'Obst. de Gynéc. de Paris.* 16:663, 1913.
10. Chavannez, G. "Sur le Nécrobiose des Fibromes Utérine au Cours de la Grossesse. *Gynécologie.* Case Reports. 16:513-524, 1912.
11. Fitzgibbon, Gibbon. "Pregnant Myomatous Uterus." *Lancet*, 1911. Vol. 2, p. 1627.
12. Frank. "Myomectomy for Necrotic Fibroid during Fourth Month of Pregnancy; Normal Labor; Pyelitis Postpartum." *Am. J. Obst.* 68:97, 1914.
13. Frankl, Oskar. "Beitraege zur Lehre vom Uterusmyom." *Archiv. f. Gynaek.* Vol. XCV; 268-343..
14. Greenwood, C. H. "Red Degeneration of Fibroids in Pregnancy with Acute Symptoms in which Hysterectomy Had Been Performed." *Brit. Med. Jour.*, 1911, I. 308.
15. Hargrave, E. T. "Fibroids of the Uterus Complicated by Pregnancy." Report of three cases. Illus. *Old Dominion J. M. & S.*, Richmond. 12:24-26, 1911.
16. Hartog, E. "Geburtskomplikation durch Myom." *Zentralbl. f. Gynaek.*. 1-34:678, 1910.
17. Hussey, Augustus A. "Fibroma Uteri; Pregnancy; Hysterectomy." *Am. J. Obst.*
18. Jordan, J. F. "Myoma Complicating Pregnancy. Discussion." *J. Obst. Brit. Emp.* 23:344, 1913.
19. Kelley, J. Thos. "Cesarean Section. The Obstetrician a Specialist." *Wash. M. Ann.* 8:263-276, 1909-1910.
20. Kinkead, R. J. "A Case of Labor Obstructed by Fibroid Tumor." *Lancet*, 1907. Vol. I, p. 94.

21. Kruger, Frank. "Myom und Graviditaet." *Zentralbl f. Gynaek.* 1-37:63, 1913.
22. Lazard, G. M. "Twin Pregnancy and Fibroids, a Case Report." *South Calif. Pract.* 29:364, 1914.
23. Lea, Arnold W. W. "Fibroid Obstructing Labor at Full Term." *J. Obst. Gyn. Brit. Emp.* 20:267, 1911.
24. Lepage G. and Vandescal. "Primipare Ayant un Fibrome Volumineux Occupant Toute la Partie Postérieure de la Cavité Uterine." *Bull Soc. d'Obst. et de Gynéc. de Paris.* 2:435-443, 1913.
25. Lobenstine, Ralph Waldo. Fibromyomata of the Uterus Complicating Pregnancy: Labor and the Puerperium. A Study Based on 100 Cases at the New York Lying-In Hospital. *Am. J. Obst.*, N. Y. Discussion pp. 134-138, 1911. Bull. Lying-In Hospital. 7:35-67, 1910.
26. Lockyer, Cuthbert. "A Case of Multiple Fibroids Removed During the Sixth Month of Pregnancy, in Which Spontaneous Labour Occurred at Term, Followed by a Normal Puerperium." *Lancet.* 1:892, 1914.
Lockyer, Cuthbert. "Fibroid Tumors of the Uterus as a Complication of Pregnancy." *Brit. Med. Jour.* 2:1232, 1910.
27. Lynch, Frank W. "Fibroid Tumors Complicating Pregnancy and Labor." *Am. J. Obst.* 68:427-429. Discussion on p. 535, 1914.
28. McCann, Fred'k. J. "Fibromyomata Undergoing Cystic Degeneration Growing from a Myomatous Pregnant Uterus. Illus." *Proc. Roy. Soc. Med. Lond.* 9:91-94. Obst. and Gynæk. Sect., 1915, 1916.
29. McGlinn, John A. "Myomectomy in Pregnancy." *Am. J. Obst.*, N. Y. 75:406-408, March, 1917.
30. Manton, W. B. "A Consideration of Pregnancy and of Fibroid Tumors of the Uterus." *J. Mich. M. Soc.* 10:78-83, 1911.
31. Morris, Lewis C. "Cesarean Section." 13:377-462, 1908-1909.
32. Mumford, James G. "Pregnancy, Uterine Myomata and Peritonitis." *Boston Med. & Surg. J.* 161-292:294, 1914.
33. Pfaff, O. G. "Fibroid Tumors Completely Obstructing Uterine Canal; Dead Foetus Long Retained without Infection. Illus." *Am. J. Obst.*, N. Y. 72:1018-1022, Dec., 1915. Tr. Am. Assn. Obst. & Gynec. 28:165-169, 1915.
34. Rouville, M. De and Guirauden. "Myome pur de l'Utérus Compliquant la Grossesse." *Bull. Soc. d'Obst. de Paris.* 14:537-540, 1911.
35. Scipiades. "Myom und Schwangerschaft." *Monat f. Geburt. U. Gynaek.* 37:162, 1913.
36. Speransky, Bachmetew. "Nekroseeines Fibromyoms der Schwangeren Gibaermutter als Aetiologisches Monat der Undurchgaengigkeit des Darmals." *Zentralbl. f. Gynaek.* 1:33-553, 1909.
37. Smyly, Wm. "Myomatous Uterus Removed during Pregnancy." *Tr. Roy. Acad. M. Ireland Dubl.* 33:331-332.
38. Stone, I. S. "Fibromyoma of the Uterus." *Am. J. Obst.* 62:440, 1910.
39. Toth, Stephen. "Myomotomie bei Schwangerschaft." *Zentralbl. f. Gynaek.* 1-33:664, 1909.
39. Toth, Stephen. "Extrauterine Graviditat bei Myom." *Zentralbl. f. Gynaek.* 1-38:815-820, 1914. Discussion.
40. Vallois. "Fibrome du Col Compliquant la Grossesse." *Bull. Soc. d'Obst. et de Gynés. de Paris.* 14:543, 1911.
Vallois. "Dystocie par Fibrome, Opération Césarienne et Hysterectomie Totale." *Bull. Soc. d'Obst. et de Gynéc. de Paris.*. 2:370-374, 1913.
41. Violet. "Fibrome et Grossesse; Ablation d'un Gros Fibrome Souspéritoneal Conservation de l'Utérus Gravide; Avortement." *Lyon Méd.* 120:455, 1913.
42. Spencer, Herbert R. "Cesarean Section and Total Abdominal Hysterectomy for Retroflexion of the Uterus at Term by Fibromyoma Adherent in Douglas' Pouch." Proc. Roy. Soc. Med. Lond. 2: Obst. & Gyn. Sec. 74-80, 1908-1909.
"Posterior Cesarean Section Followed by Total Hysterectomy for Fibroids." Proc. Roy. Soc. Med. Lond. 3: Obst. & Gyn. Sec. 82-84, 1909-1910.
43. Paucot, H. and Vanverts, F. "Fibrome et Grossesse; Hystérectomie Abdominale." 14:449, 1911. Bull. Soc. d'Obst. de Gynéc. de Paris.
Paucot, H. and Vanverts, F. "Torsion d'un Fibrome Uterine au Cours de la Gestation; Moymectomie; Avortement." Bull. Soc. d'Obst. et de Gynéc. de Paris. 3:545-548, 1914.
44. Bonnifield, Chas. L. "Fibroids and Pregnancy." Tr. S. Surg. & Gynec. Assn. Case Reports. 21:314-325, 1918.
45. Griffith, W. S. A. "Pregnancy with Uterorectal Adenomyoma with Extensive Decidual Metaplasia." Proc. Roy. Soc. Med. 7:389-392 (Obst. & Gyn. Sec.), 1913-1914.
Griffith, W. S. A. "Large Cervical Fibroid in the Vagina Obstructing Labor." Proc. Roy. Soc. Med. Lond. 3: Obst. & Gyn. Sec. 188.
46. Haultain, F. W. N. "Remarks on Pregnancy Complicated by Fibromyomata of the Uterus: A Record of Ten Cases Treated by Laparotomy. *Brit. M. J.*, Lond. 2: 1665-1667, 1908.

CASE OF GUNDÚ OBSERVED IN BAHIA, BRAZIL.

By DRS. FERNANDO LUZ and OCTAVIO TORRES.

Translated from the Portuguese for the *Journal* by Dr. A. McSHANE, New Orleans.

The case which we have the pleasure of presenting to the Second South American Conference of Hygiene, Microbiology and Pathology, is very interesting not only on account of the lesions which the patient presented, but also on account of its rarity.

The present observation was made by myself and my distinguished colleague and friend, Professor Fernando Luz.

We shall not give the history of *gundú,* or *anakré,* for this can be found in every good text-book of tropical medicine. We will merely mention that the first case observed in America was reported by our friend, Prof. Pacheco Mendes, of Bahia, in a mulatto (1), who was operated on by the same professor, who endeavored to make anatomical and histo-pathological studies of the excised part.

The photographic studio of the College of Medicine in Bahia has a photograph of a patient with gundú in a negro, which was reported by Dr. John Gouveia, a physician of the hospital. The photograph was ordered by an assistant of the faculty. The case that we are about to report was also in a mulatto.

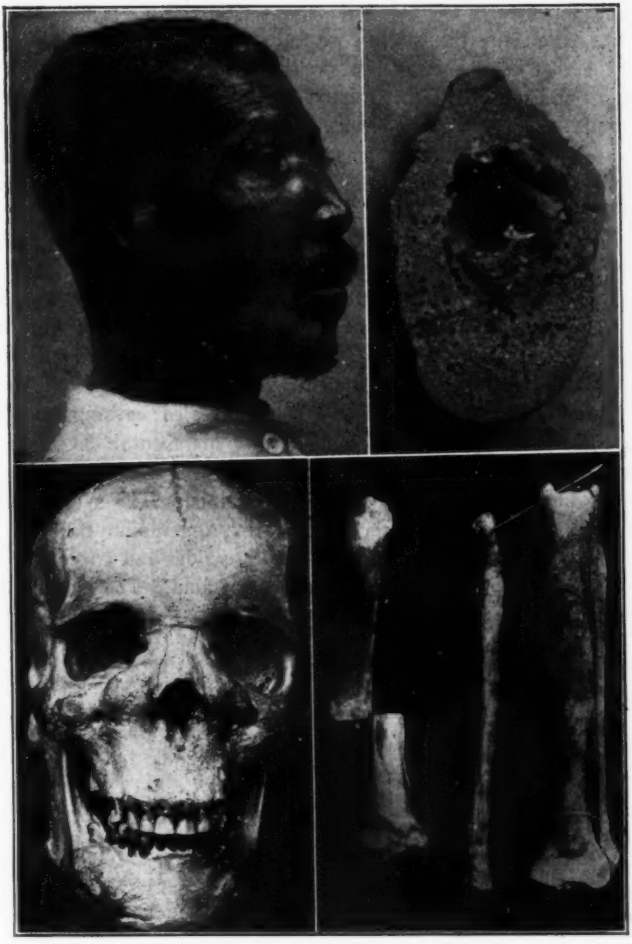
Manoel F., mestizo (mulatto), native of Bahia, living in the city of San Francisco (district of Santo Amaro), about sixty years of age, stone-cutter, entered Santa Isabel Hospital in the beginning of 1916, in a clinic under the care of one of the professors of medical clinic.

This illustrious colleague examined the patient, and ascertained that he was not dealing with a case properly belonging to this clinic, and he transferred him to the clinic of Professor Fernando Luz, who immediately made a diagnosis of gundú or anakré.

In collaboration with Prof. Luz we studied this case with great interest.

Our questioning did not advance matters much, on account of the ignorance and stupidity of the patient. However, we did manage to extract the following information: both parents are dead; he has no brothers living; he does not know what they died of; he did not know if his mother had any abortions; his own personal antecedents are of no importance.

(1) Pacheco Medes: A propos d'un cas de Gondou ou Anakré. *Revue de Chirurgie,* XII, 1901, Page 445.



Illustrating Article of Dr. Torres.

He does not remember when his disease began. He entered the hospital because he was no longer able to work, and because he had some parasites in the skin of his feet *(Sarcopsilas penetrans)*.

On examining the patient, we found the following: two tumors at the root of the nose; two swellings, each three centimeters in length and one in width, situated one on each side of the inferior maxilla and one centimeter above the free border of the latter; exostosis of the following long bones: ulnas and radii; tibia and fibula, several ribs, the humeri, clavicle, metatarsal bones, and some metocarpal bones.

Besides this, the patient had hypertrophied mammillæ; genital organs apparently normal; poor development of hair; and the feet turned outwards, making an angle of more than ninety degrees; the inner border of each foot did not follow a straight line, but each border formed an obtuse angle of 160 degrees outwards at the level of the tarso-metatarsal articulations.

Examination of the internal organs revealed nothing, as they function perfectly. He was anemic and his mental development was very rudimentary.

The blood, feces and urine were examined. The Wassermann reaction was made by our colleague, Dr. Aggrippino Barbosa; it was negative. In the feces were found ascarides and tricocephalus. In the urine, nothing of importance was found. The blood count was as follows:

Red corpuscles	2,520,000 per each milliter
White corpuscles	6,230 per each milliter
Hemoglobin (Tallquist)	50 per cent.
Differential blood-count:	
Polynuclear neutrophiles	57 per cent.
Polynuclear eosinophiles	8 per cent.
Transition-forms	4 per cent.
Large mononuclears	4 per cent.
Large lymphocytes	21 per cent.
Small lymphocytes	6 per cent.

The patient remained under observation in the Surgical Clinic of Prof. Fernando Luz, and then we carried on our inquiries for the purpose of ascertaining the cause of the disease.

As the disease progressed, there appeared a paralysis of the lower limbs and a relaxation of the sphincters. Some days later a severe diarrhea came on, and we were obliged to transfer him to

the isolation department of the hospital, with a request to inform us concerning the future course of the disease.

The patient died a few days later; but we did not learn about it until the patient had been buried three or four days.

We had planned to make a minute necroposy, and to make cultures, sections of the diseases, tissues, etc.; but, for the reason above stated, this was impossible. However, we obtained, through the courtesy of Prof. Oscar Freire, Director of the Nina Rodrigues Institute, of Bahia (Medico-legal Section), acting in accord with the head of the Casa da Santa Mizericordia, permission to exhume the remains and perform a necropsy, which was done by the eminent master and colleague, Prof. Oscar Freire, assisted by Drs. Almir Oliveria and Fernando Luz, and myself.

The cadaver was exhumed six or seven days after burial. As it was impossible to hold a regular autopsy, we decided to remove several pieces; so, we took away the head and both legs, not disturbing the rest, although all the infected parts were interesting. We made photographs of the structures removed, which are presented herewith.

The lesions were as follows: pyriform tumors of the ascending apophyses of the superior maxillary bones, which encroached slightly on the lower border of the orbit and the nasal fossæ, gradually diminishing towards the malar bones; on the lower maxilla, there were two tumors three centimeters in length and one and a half in width, lying parallel with the maxillary border. These tumors were of the same nature as those above described (see photograph).

Small exostoses of the cranium, which were perceptible during life, were more evident after death.

The tibias and fibulas, which presented large exostoses, easily seen in photograph, were the seat of interesting lesions (see photograph). The lesions are seen to be clear: the tibias have lost their anterior border in their entire length, and were almost doubled in thickness, the tumors being best developed in the lower two-thirds. There was close union between these bones and the fibulas, which were adherent at the upper and lower ends. The tibial *plateaux* showed exostoses laterally.

The thickened fibulas seemed to be twisted on their long axis, being thickest in the lower two-thirds. In the uper third (see photograph), we see perfectly the union of these two bones with the tibias.

Apparently, the long lesions are those of osteo-porosis.

In the photograph, the two bones are united as by a cord; and since the manipulations through which they passed threatened to break this union, the bones were prepared as shown.

We made longitudinal sections of one of the tibias, not only to see the shape of the bones but also to study the medullary canal.

The dimensions were visibly increased in all directions; the medullary canal was extremely reduced, presenting a small orifice, which was not sharply limited, but was lined by a kind of reticulated bony tissue, the deeper portions of which blanded with the cavity of the bone (rarefying osteitis).

From photograph, which was partly destroyed by the saw, this tissue was well developed.

On the posterior surface of the tibia, a well developed bony ridge is seen.

On transverse section, we distinguished tissues which seem to be of a different character.

Thus we find one part very porous, spongy, corresponding precisely to the anterior border and the two surfaces; and on the other hand, there exists a ridge of the same kind of tissue; and deeper in we find a small semicircular patch that has a cartilaginous aspect.

Sections were made of the bony tissue, and these are now being studied from a histo-pathological standpoint by the eminent Prof. Bowmann Crowell, at the Oswaldo Cruz Institûte.

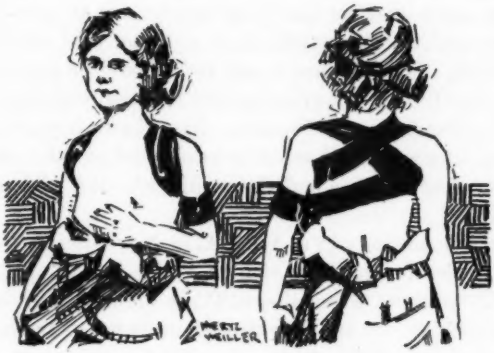
DRESSING FOR FRACTURE OF THE CLAVICLE.

DR. E. L. LECKERT, New Orleans.

I have adopted for several years, a method of immobilizing fractures of the clavicle in children which may be worthy of mention. While nothing original is claimed, a combination of other methods being used, it has given entire satisfaction both from a clinical standpoint and as a comfortable dressing. In our climate, the use of Z. O. plaster next to the skin causes such irritation and discomfort as to make its use impracticable. Bandage dressings require frequent changes, as they become loose even though reenforced with Z. O. plaster. Axillary pads are difficult to retain.

The material needed is usually in the house, and the dressing can be aplied on the first visit.

Method: A piece of cloth long enough to make a posterior figure of eight about the shoulders, and four or five inches wide, is padded with cotton in each part that is to encircle the axillæ. The affected side is padded heavier, and if pressure is desired over the site of fracture, that part fitting over the clavicle, likewise.



The cloth is folded to two or two and a half inches, and sewed sausage-like. This is applied as a posterior figure of eight bandage, and after drawing the shoulders fully back which in most fractures reduces the deformity, the ends are firmly sewed together. This dressing acts as a reduction and retentive bandage and an axillary pad. A second piece of cloth is padded on one end for several inches, and likewise folded and sewed. The padded end is placed around the arm on the affected side and sewed. The arm is well drawn back, and the free end is sewed to the lower opposite part of the figure of eight. Some elevation of the shoulder is thus obtained, and complete immobilization of the arm. A sling may be used.

If care is exercised in applying the dressing, it will remain snug for a week or more. However, should it become loose, a few extra stitches will be necessary from time to time. The entire dressing is changed when soiled.

COMMUNICATION

IS TRACHOMA PREVALENT IN NEW ORLEANS?

New Orleans, August 10, 1920.

To the Editors of the *New Orleans Medical & Surgical Journal:*
Gentlemen:

I quite agree that medical controversies are to be deprecated; but where an important truth is in question they should not be shrunk from. It is needless to say they should be conducted with decorum, less the laity be given ground for retwisting their favorite gibe on the disagreement of doctors. As if the verities of constantly advancing science and art could be established save by the gradual accumulation of evidence and the conflict of mind with mind over its validity.

During the meeting of the A. M. A. in New Orleans, I took part in the discusion before the section on Public Health of a paper by Dr. J. W. Jervey, of Greenville, S. C., in the interest, I believe, of truth and justice. In my little paper I made use of the expression, that, were anyone suddenly to assert the prevalence of trachoma in New Orleans, I should think myself bound to take up the cudgels in defense of my community. These were the words, I think, certainly the sense of my remark. Dr. T. J. Dimitry, who was present, evidently understood my meaning, as his declaration, later, that he proposed "to throw the cudgels on the opposite side," showed. When I heard, therefore, that our confrere was going to read a paper before the Orleans Parish Medical Society maintaining his opposition to my expressed belief, I went to the meeting and participated in the discussion.

My talk was entirely extempore and, I expect, was rather rambling and long drawn out, as such talks usually are. I supposeed that it would be taken down in short-hand and afterwards, according to custom, would be submitted for revision and could then be pared down to the kernel. Later, I was surprised when asked to supply in writing what I had said. I was of course, unable to do so. It is on this account, because the matter is undoubtedly of no small importance, that I now beg space to present as briefly as possible the reasons for disbelieving that trachoma is prevalent in New Orleans or in Louisiana. I hope to show that the facts are

so apparent that no extended investigation is necessary to uncover them.

The first half of Dr. Dimitry's title, Trachoma Exists in New Orleans, is an assertion that no one controverts, or so far as I know has ever controverted. When I saw the disease in the Charity Hospital some 35 years ago and gained the lasting impression that it was found for the most part among foreigners who came to winter here, I never fancied myself a discoverer. Since then prolonged experience has fostered the belief, which the doctor must often have heard me declare, that trachoma is rare among our creole population, the descendants of the French and Spanish immigrants of long ago. It is inconceivable that any one would maintain, favored though we may be, that the mere privilege of being born within the Pelican State could confer immunity to the disease. But all this is very different from saying that trachoma *prevails* among our people; prevails to such an extent as to constitute a grave danger; to justify alarming them, introducing a new phobia, and courting the risk of disagreeable and injurious outside interference.

Yet, I submit this, in spite of his title, is just what Dr. Dimitry's paper and his unpublished argument closing the discussion upon it imply. If this implication was not intended, what was the object of the paper; what the necessity of "throwing cudgels" against one who expressed a contrary belief? Hardly to prove what every one admits and what our hospital reports have been showing for many a long year.

First, as to the introduction and spread of trachoma in Europe, its prevalence in foreign countries or its distribution in this, I shall say nothing. It merely serves to distract attention from the question at issue and can readily be found in our text-books and cyclopedias. I shall be equally silent on the application of such names as "insurgents," "obstructionists," etc., to those who differ from us in opinion. They have no place in scientific discussion and need no reply.

To begin with, then, the prevalence of trachoma cannot be proved by the collection of fifteen or twenty—or fifty or a hundred—cases out of a population of four hundred thousand. Every ophthalmologist will admit that even a greater number might be brought together in almost any city of a hundred thousand inhabitants, especially by looking through the public schools and eleemosynary institutions. Indeed, when we consider that Dr. Dimitry has for

some time been devoting his attention to trachoma, as we know by this and another paper read before the Parish Medical Society and an interview in the public press, and that he has asserted, to his confreres at least, his invention of a method of cure, the small number of cases he exhibited tends to show rather the rarity than the prevalence of trachoma among our population. The argument as to the liability of the creole is the same. Even in the negro, perhaps we should say the southern negro, whose relative immunity has been admitted by almost all who have treated great numbers of the race, cases may be found now and then. The presentation, therefore, of a few afflicted ones out of our large creole population cannot be called decisive evidence. Whether this relative minority is a fact or merely a phenomenon due to the general rarity of the disease in Louisiana, and, if it be a fact, to what prime cause it is to be ascribed, are admittedly unsettled questions.

Although there are well known places in which trachoma is endemic among a population of long and pure American descent—for instance the inhabitants of the great Appalachian Mountain range—it is a commonplace of observation that where ever the population is mixed, the disease is found much more frequently among the foreigners, their immediate descendents and that part of the American population which lives in close contact with them. The reason is transparent; trachoma is a disease of poverty and its concomitant squalor and becomes rarer as wealth, and the improvement in hygiene it makes possible, increases. Cases are always seen much oftener in hospital than in private practice. Dr. Victor C. Smith and Dr. Chas. A. Bahn, the two ophthalmologists who also took part in the discussion, emphasized this point. Dr. Bahn, among 750 private patients seen since his return from military service, found but five (5) cases, three old and two recent "and two suspects later proven not to be trachoma." Dr. Smith said, "I seldom see a case of trachoma and rarely in my private practice." He added that his associate in hospital practice, Dr. Marcus Feingold, had had the same experience. My own coincides.

The statement of Dr. J. B. Guthrie, during the discussion, that among seventeen hundred troops from Louisiana, Mississippi and Arkansas only twenty-six cases of trachoma were discharged from the service during nine months, of whom the smallest number were from Louisiana, throws a strong ray of light upon the subject.

Dr. Dimitry, who had served with him on a Local Medical Examining Board during the world war, was asked by Dr. F. W. Parham if he knew what percentage of drafted men from New Orleans were rejected on account of the presence of trachoma or its sequelæ, but he was unable to say. Through the courtesy of the Surgeon General, U. S. A., I am able to give the figures so far as they are available. "Statistics have been compiled in this office for all men rejected by the various Local Boards and 2,000,000 of the 2,700,000 selective service men who were sent to military camps. Unfortunately there was no information recorded on the physical examination form to show the color of the registrant or his age. It may, however, be presumed that the figures quoted below are for men between the ages of 21 and 30, as few, if any, registrants of any other ages were inducted; of men of this age in the city of New Orleans 13,403 were examined by the Local Boards. Three thousand and eighty (3,080) were rejected as physically or mentally unfit for all military service. * * * * * Below is a table showing the total eye defects of various kinds which were noted in the registrants from the city of New Orleans. * * * * * The ratios that are given are proportioned to each 1,000 men examined in the city. If you attempt to verify these ratios by the number of men examined, you will obtain different ratios, for as stated above not all the men who were sent to military camps were studied statistically." The table referred to shows: "Trachoma (conjunctivitis granular) absolute numbers 9, ratio .82" (per 1,000).

The statistical tables appended to the report of the Surgeon in Charge of the Eye Department of the Eye, Ear, Nose and Throat Hospital for the ten years from 1907 through 1917 (that for 1914 being omitted on account of defective compilation) shows that during the decade 34,388 cases were seen of which 5,830 were diseases or injuries of the conjunctiva; out of this number 186 were trachoma in white and 17 in persons of color—between 5 and 6 per 1,000. The percentage of error is certainly small, because the diagnosis in every case was made by the surgeon in charge of the department and every case of folliculosis at all suspicious was treated under a provisional diagnosis until the result made certain its nature.

In conclusion, a word may not be amiss on the differential diagnosis between trachoma and folliculosis and on the curability of true trachoma. I have yet to hear of an ophthalmologist past the

embryonic stage who demands that the lids should be filled with scar tissue or that pannus should be present to enable him to make a diagnosis. Unfortunately, that there are many cases in which a diagnosis cannot be made at once is not an individual opinion, but is generally admitted. Not to overload this communication, let quotation, for the present be restricted to three most authoritative texts in general use. Each author deals carefully with the differential diagnosis between folliculosis and trachoma and each in all candour is driven to these conclusions. Says Fuchs (3d Amer. Ed. 1908, p. 83) "the correct diagnosis can be made as a rule by our finding the conjunctiva studded with numerous granules. But if these are absent during the first days of illness, or if because of the great swelling of the conjunctiva, they are not apparent, the subsequent course of the disease may be the only thing that can clear up the nature of the latter." And again on page 98: "But these characteristics are sometimes so obscured that even experts cannot, in many cases, make the diagnosis with certainty and the subsequent course of the disease alone affords the desired information."

Roemer (Foster's translation, 1912, V. I. p. 105): "and such a differentation is by no means always easy. * * * * * * "We must be content in many cases with a diagnosis of 'trachoma (?)'. The subsequent course and the results of treatment will differentiate the benign forms because they readily get well" p. 114.

DeSchweinitz (8th Ed., 1916, p. 218): "Certainly so called benign follicles exist which disappear without a residue of lesions, and, on the other hand, an infection with follicular formation arises which subsides after a long period of time and leaves cicatrices. Between these two forms are the 'border line' cases which are difficult to classify."

If by cure Dr. Dimitry means the restoration of the trachomatous conjunctiva to its normal state and function, and the positive expressions he uses seem to indicate such a belief, then he must be wellnigh alone in his faith and the burden of proof he assumes is enormous. The evidence adduced must be abundant and clearly and minutely set forth. Every one admits that trachoma may be arrested, after leaving lesions of greater or less extent, and even those of small experience know that relapses are the rule rather than the exception.

To quote once more from the authorities above cited: "In the

subsequent course of the disease the hypertrophy of the conjunctiva gradually increases, growing steadily greater, until it has reached a certain height, which is not the same in all cases. Then it disappears again, step by step, while a cicatrical state of the conjunctiva takes its place. In this way the trachoma is cured in the sense that the specific morbid process has come to an end. Nevertheless the conjunctiva has not become normal again by any means; on the contrary it bears upon it lasting marks of the disease that has passed." (Fuchs, l. c., p. 80).

"In other cases the disease gets well with comparatively slight scars, and this may even occur without any treatment, inasmuch as the hypertrophy of the conjunctiva attains only a moderate pitch and then spontaneously abates." (p. 83). "Trachoma then is a disease which is distinguished by its duration, extending over years" (p. 87).

"The name trachoma should be applied only to such diseases of the conjunctiva as are able to inflict permanent injuries upon the eye, to those only in which the hypertrophy of the conjunctiva ends in the formation of cicatricial tissues." "Any granular disease of the conjunctiva that results in cicatrization is trachoma." (Roemer, l. c., pp. 105 and 112).

"An infection with follicular formation arises, which subsides after a long period of time and leaves cicatrices (deSchweinitz, l. c., p. 218).

These unqualified statements of the result of their experience by such observers do not tend to encourage in any man the conviction that he has cured trachoma and such an assertion imposes, I repeat, a great burden of proof.

The reason of this difficulty in diagnosis is not far to seek. All pathologists, I believe, agree with Fuchs that "even in the histological structure no thorough-going distinction can be found between follicles and trachomatous granulations." No absolutely specific organisms have been found invariably associated with trachoma, though Dr. de Schweinitz thinks that the finding of Prowazek bodies "is highly significant. Their absence, however, does not exclude trachoma." The difficulty is enhanced by the fact that secondary or mixed infections are notoriously common with trachoma, and a great variety of appearances are thereby produced. It would seem that trachoma is a folliculosis of the conjunctiva, acute, probably, only when the infection is mixed, to which some

unknown element is added causing hypertrophy and subsequent cicatrization of the conjunctiva. This element, up to the present time, all our efforts have failed to reveal.

H. Dickson Bruns, M. D.

OBITUARY.

In our last issue we made a brief record of the death of Dr. Robin, who died on July 9th, 1920.

He was the son of Ernest Robin and Pamela Favre. Born on his father's plantation near New Roads, Point Coupee Parish, fifty-one years ago, he was first of all, by breeding and instinct, a gentleman.

Educated at the Jesuit College of this city, he received the B. Sc.; after having served as a Resident Student in the Charity Hospital, he graduated in medicine in 1891 from the Tulane University of Louisiana.

For a short time after his graduation he practiced General Medicine, while living with his father's sisters at their home in St. Charles Avenue. He grew interested in the study of ophthalmology when assigned to the "Eye Wards" for part of his term in the Charity Hospital, and cherishing a wish to devote himself to that branch of medicine, as soon as he saw his way, he applied for and received an appointment to the staff of Visiting Oculists to that Institution. There he worked with such zeal and intelligence, that in 1895 he was called to the position of First Assistant Surgeon in the Eye Department of the Eye, Ear, Nose and Throat Hospital. He now turned all his energy and ability to this service and his rise was sure and steady. Visiting the clinic daily for many years, he enlarged his diagnostic and therapeutic knowledge, perfected his surgical skill and broadened his experience, by the study of the great number of medical and surgical eye cases seen year after year in this department of "The Senses Hospital." His elevation to Surgeon in Charge of the Department took place in 1914. Meanwhile, after having held for several years the position of First Assistant to the Chair of Diseases of the Eye in the New Orleans Polyclinic (Graduate Department of Tulane University), then that of Assistant Professor, he was in 1904 promoted to a full professorship. These appointments, which he held at the time of his death, crowned the ambition of his life of long and useful labor. In 1895

he visited the important European eye clinics, spending most of the time in Paris, under Panas, and in Vienna, under Fuchs. The only other incident of interest in his professional career was the partnership with his friend and old hospital chief of more than thirty years, Dr. Henry Dickson Bruns. This was entered into in 1898 and continued in amity and mutual respect and confidence for twenty-two years.

He was a valued collaborator on the staff of the JOURNAL.

Dr. Robin married Miss Mary Titus, of this city. Comforted by her constant affection and care and by the fond companionship of their sons, Ernest and Marion, the smooth current of his domestic life flowed with unbroken happiness.

In character Dr. Robin was courageous and self-reliant. A strong sense of justice and a love of truth made him punctilious in the discharge of every obligation. As a companion, he was cheerful and entertaining; as a friend, ready and loyal. These qualities led naturally to a constant interest in political affairs and to the unflagging performance of his duties as a citizen. His mind was clear and logical and his highest pleasure was to store it with information drawn from well-chosen sources by discursive reading in two languages. Though French was the language of his infancy and he continued to draw intellectual enjoyment from its nice refinements, he read with attention what is best in English until he wrote and spoke it with particular exactness and with entire freedom from Gallicisms.

Dr. Robin was not a prolific writer, but what he wrote was terse and to the point; drawn from his own store of observation and reflection and little dependent upon the authority of others. He contributed to our knowledge of the tuck-operation for shortening the recti muscles, of the ambulant after treatment of cataract operations and of the method of extraction of the opaque or dislocated lens by the use of a long conjunctival bridge. He demonstrated this operation at the meeting of the American Medical Association to his confreres of the ophthalmic section from other states; for of all operators in our country, he had perfected this mode and made it his own and was able to show by a long series of successes that it is not only the procedure par excellence for the removal of a dislocated lens, but the best means of averting loss of vitreous and infection of the wound when these grave complications are most to be dreaded in the extraction of senile cataract.

As a teacher Dr. Robin was pleasant, wide ranging and exact. He stimulated his pupils to think for themselves. They grew not only to admire him as their instructor, but to esteem him as a man and a friend. Hundreds of them scattered throughout the south will mourn his death with a sad sincerity.

The loss of such a man may not be well supplied. Where character is admired and scientific attainment respected, his death should be lamented, his talent praised, his services extolled. If panegyrics are pronounced over him who accumulates wealth, increases industry or commerce, multiplies employment, and devises new apparatus, some meed may be afforded him, who, turning from material rewards, devotes his life to acquiring, amplifying and disseminating knowledge of the art that fights against man's fate, against the calamity that men almost universally hold to be worse than death.

Saved by a sense of humor, free from pretense and despising it in others, too proud to put his lips to the trumpet of his benefactions, the first to own that they were but part and parcel of his daily duties, this man in expenditure of time, in scorn of delights and the living of laborious days, gave to the poor of his city an incomputable sum of help, of hope, of deliverance. The forehead of the philanthropist is worthy of the laurel; may not one leaf be allowed to fall upon the brow of such a one as Ernest A. Robin?

NEWS AND COMMENT

Dr. J. Birney Guthrie, Chairman, Scientific Essays Committee, announces a resumption of the scientific sessions of the Orleans Parish Medical Society, with the opening (post-vacational) meeting to be held September 13th, 1920. This meeting is to be a "Symposium on Mental Disorders," under the direction of Dr. R. M. VanWart. As considerable effort and research work have been put forth to make this meeting a scientific success a large attendance is anticipated.

Civil Service Examinations.—The United States Civil Service Commission announces open competitive examinations for positions as Bacteriologist, Associate Bacteriologist and Junior Bacteriologist on December 1. Applicants should at once apply for Form

1312, stating the title of the examination desired, to the Civil Service Commission, Washington, D. C., or to the Secretary of the United States Civil Service Board, Customhouse, in their district. Applications should be properly executed, including the medical certificates, and filed with the Civil Service Commission, Washington, D. C., without delay.

TURKISH MEAT PACKERS REFORM.—Meat packing is being revolutionized in many Constantinople establishments since the advent of the American Red Cross. At the Refugee Camp of the Island of Proti where that organization is caring for thousands of refugees, the meat was arriving in the usual Turkish style, the carcasses hanging in packing boxes, left open on one side for easier handling, and strapped to a donkey. Flies and germs held revel all the way from the docks to the warehouses. "Right about face" ordered the Red Cross officers and the Turkish vendors seeing that they must either conform to these unheard of standards of sanitation or lose a profitable patronage, mended their ways.

MEMORIAL TO BE DEDICATED BY JEFFERSON MEDICAL COLLEGE.—As a tribute to those graduates who gave their lives in the service of their country during the late war, the Alumni Association of Jefferson Medical College has planned to dedicate a memorial, which will be in the form of a large bronze tablet, 5 feet high by 4 feet wide. The tablet will be decorated and engraved with the names of the men who surrendered their lives in the service, and will be placed in the main entrance to the college at Tenth and Walnut Streets. Dedicatory ceremonies will be held in the college building on Thursday, October 7, 7 P. M. Jefferson Medical College was represented in the war by 1147 graduates, twenty-five of whom gave up their lives.

ACTIVITIES OF ANESTHESIA SOCIETY.—Announcement is made by the National Anesthesia Research Society that at their annual meeting to be held in Pittsburgh, October 4 to 8, its research workers will present the results of their experiments and observations. Prizes of $200 have been offered for the best papers submitted. The Toledo Society of Anesthetists has been organized with a 100 per cent enrollment of all recognized anesthetists of the city. It is reported that fourteen county societies in California have adopted resolutions favoring the limitation of the administration of anesthesia to regular licensed physicians and surgeons.

ANTHRAX NOT FATAL.—A statement by Dr. Douglas Symmers, director of the Pathological Laboratories of Bellevue and Allied Hospitals on the recent discharge of a well known polo player suffering from anthrax, the claim is made that the disease is not fatal if treatment is begun early. This is the the fifth case reported by Bellevue as being cured with the serum prepared by the United States Department of Animal Industry.

NEW YORK ON GUARD AGAINST PLAGUE.—Health Commissioner Dr. Royal S. Copeland, with the $80,000 recently given to the Department of Health by the Board of Estimate for the purpose, plans to begin an active campaign to guard against an invasion of the plague that is now ravaging sections of Europe. The health department has taken up the work of educating the public regarding the prevention of the disease. It is the intention of the Health Commissioner to extend the work of exterminating the rats along the water front.

MISSOURI VALLEY SOCIETY MEETING.—The Medical Society of the Missouri Valley will hold their thirty-third annual meeting in Omaha, September 6 to 7, under the presidency of Dr. Charles Ryan, of Des Moines, Iowa. The society will be the guest of the Omaha-Douglas County Medical Society.

CANADA UNIVERSITY NEWS.—An offer of a Red Cross Chair of Public Health has been made the University of British Columbia by the Provincial Red Cross of British Columbia. The Red Cross will pay the salary of the professor of public health for three years. The activities of the department will be province-wide. The course will extend over a period of five years. The Faculty of Medicine of the University of Toronto has prepared a survey for the Rockefeller Foundation, which shows Ontario in the lead with one physician to every 905 population. British Columbia comes next with one to 906, Nova Scotia third with one to every 908, and Manitoba fourth with one to every 1,098.

MASSACHUSETTS CENTRAL HEALTH COUNCIL.—For the purpose of cooperation between the various health agencies throughout the state a General Health Council has been organized in Massachusetts. The new organization will consist of representatives from the public health nursing, child welfare, medical and dental groups, tuberculosis, cancer, state and local health officials, the Red Cross, and the American Public Health Association. Dr. Enos H. Biglow, of

Framingham, has been made president. By means of this organization it is expected to eliminate the duplicating and overlaping of duties.

WISCONSIN UNIVERSITY TO GIVE FULL MEDICAL COURSE.—By the terms of legislation recently enacted the medical course of the University of Wisconsin will be expanded to a complete four year course. This university has heretofore given only two years of medical instruction. The teaching of the third year will it is understood be offered in the fall of 1923 and that of the fourth year in the fall of 1924. A state hospital will also be established at Madison.

SANITARY CODE AMENDED.—In order to prevent anthrax the Sanitary Code of New York City has been amended to provide for the sterilization of hair used in toilet articles. The sterilization must be in accordance with the rules of the Board of Health.

COMMISSION ON MEDICAL EDUCATION.—Virginia has appointed the following medical men as a Commission on Medical Education: Dr. Beverly R. Tucker, of Richmond; Dr. James H. Dillard, of Charlottesville; Dr. Julian A. Burrus, of Blacksburg; Dr. Stuart McGuire, of Richmond, and Dr. Theodore Hough, University of Virginia. The commission has been appointed to make recommendations leading to the establishment of a single medical school in Virginia to be state supported.

MEETING INTERNATIONAL SURGICAL CONGRESS.—The fifth International Surgical Congress meeting was held in Paris, July 19-22. Representatives of thirteen nations presented papers. Clinics were held in various hospitals of Paris during the mornings; the scientific program being carried out in the afternoons and evenings. Sir William MacEwen, professor of surgery in Glasgow University, was elected president. The date of the next meeting was fixed for July 16, 1923, with London as the meeting place.

RED CROSS ROLL CALL.—Plans for the Fourth Roll Call of the American Red Cross have been set forth by Frederick C. Munroe, general manager. Armistic Day, November 11, and Thanksgiving Day, November 25 have been set on which the call is to take place.

APPROPRIATION FOR RADIUM.—An appropriation of $225,000 by the state legislature of New York recently, enabled the New York

State Institute for the Study of Malignant Diseases, in Buffalo, to purchase two and one-quarter grams of radium, which will be available on and after October 15. Preference will be given to residents of New York State, but any citizen of the United States will be treated free of charge. The director of the Institute is Dr. Harvey R. Gaylord.

HONORARY DEGREES CONFERRED.—The honorary degree of Doctor of Laws was recently conferred by Cambridge University upon Dr. John Jacob Abel, professor of pharmacology at Johns Hopkins Medical School, and Dr. Harvey Cushing, professor of surgery at Harvard Medical School.

MEDICAL JOURNAL IN PALESTINE.—A new medical journal published by the Jewish Medical Association of Palestine has just made its appearance. The new publication will be published quarterly and entitled Harefoosh (Medicine). The American Zionist Medical Unit has greatly stimulated medical work in Palestine during the past two years; native members of the profession being taught modern methods. It is planned to utilize the hospitals and clinics established by the American unit as a beginning for the Medical College of the Hebrew University at Jerusalem.

NEGRO PHYSICIAN FELLOWSHIPS.—Mr. Julius Rosenwald of Chicago recently provided six fellowships for negro physicians, in amounts of $1,200 each. These are to pay the expenses of qualified negro students doing graduate work in the fundamental medical sciences.

MEDICAL EDUCATION DONATION.—Mr. John D. Rockefeller during the year added another $20,000,000 to the general education fund which is to be used for the improvement of medical education in the United States. The interest and principal is to be distributed within the next fifty years.

DECREASE OF DRUG ADDICTS IN CANADA.—By a report of Dr. John R. Amyot, Toronto, deputy minister of public health success is shown in the efforts of the department of health to wipe out the opium evil in Canada. The department also met with success in breaking up attempts to create an opium ring in the Dominion. On September 1, the opium and narcotic drug act, passed at the last session of Parliament will become effective. Under the act all druggists, wholesale and retail, and all manufacturers will be

compelled to keep a record of receipts, together with a record of the quantity manufactured as well as a record of their sales.

PERSONALS.—Dr. G. A. Thomas of New Orleans, recently returned from service in the army.

REMOVALS.—Dr. Elliott Kiblinger, from Marksville, La., to 204 Hughes Building, Dallas, Texas.

Dr. O. F. Howe, from Kerens, Tex., to Thorndale, Texas.

MARRIED.—On August 18, Dr. Andrew V. Friedrichs to Miss Anna Crawley, both of New Orleans.

On June 23, Dr. George W. Faivre to Miss Julia Leidenheimer, both of New Orleans.

BOOK REVIEWS AND NOTICES

All new publications sent to the JOURNAL *will be appreciated and will invariably be promptly acknowledged under the heading of "Publications Received." While it will be the aim of the* JOURNAL *to review as many of the works accepted as possible, the editors will be guided by the space available and the merit of respective publications. The acceptance of a book implies no obligation to review.*

A Diabetic Manual for the Mutual Use of Doctor and Patient, by Elliott P. Joslin, M. D., 2nd edition. Lea & Febiger, Philadelphia and New York, 1919.

The personal experience of the reviewer, who has given this manual to a considerable number of his diabetic patients, has convinced him of its great value in aiding him to secure the best attainable results in the treatment of these cases. However, it is not only as a guide to the patient that this booklet is of value, for it contains, in readily assimilable form, the most important facts and measures bearing on the treatment of diabetes. Consequently the physician wishing to familiarize himself with the newest and best methods of treating this disease will find in it a concise, clear, and correct statement of these things. The work is unqualifiedly recommended. J. T. HALSEY.

Pasteur, The History of a Mind, by Emil Duclaux. Translated by Erwin F. Smith and Florence Hedges. W. B. Saunders Company, Philadelphia and London.

The translators of Duclaux's work pay large tribute to the author, who himself was no small factor in the development of micro-biology. As the co-worker and spirited contemporary of Pasteur, later serving as director of the Pasteur Institute in Paris, Duclaux was indeed qualified for the task of interpreting Pasteur. It has been a worthy task for the translators to place this work at the disposal of readers in an English version.

The text itself is full of interest as it unfolds the development of

the great genius and inspiring philosophy of the wonderful Frenchman, who cast the mold in which the present science of medicine has since drawn most of its methods. As a contribution to the knowledge of Pasteur, Duclaux's commentary must be always valuable; the translators deserve the credit of recognizing and transposing the original French into readable English. The book carries chronological prints of Pasteur which in themselves enhance the value of the book.

DYER.

A Manual of Physical Diagnosis, by Austin Flint, M. D., LL. D. 8th Edition, revised by Henry C. Thatcher, M. S., M. D. Lea & Febiger, Philadelphia and New York.

Perhaps a reviewer in commentary on this standard guide in diagnosis can do no better than quote from the preface to the 8th edition, which justifies its continuance with revisions, by stating that it is a response to the "demand of the student and of many graduates for simplicity, directness and skill in dealing with physical signs in health and disease." In such particular this work will continue to satisfy the demand.

DYER.

Manual of Psychiatry. Edited by Aaron J. Rosanoff, M. D. Fifth Edition. John Wiley and Sons, New York; Chapman & Hall, London.

After four years this collaborative work appears in a new edition. Reflecting the French school in earlier editions, this Manual still follows its original source, the work of J. Rogues de Fursac, in the arrangement of the material, though the editor with other American specialists in psychology and psychiatry have added materially to the content and to the value of the book. While in nowise intended as an exhaustive study of psychiatry, this work covers a large amount of ground and in all particulars it is well done. The chapter on Psychanalysis is a close commentary on Freud and his teachings, although other disputants are given some show. Of particular value are the many references and the plentiful bibliography. Modern in its presentation and practical in its scope, this Manual deserves a place among current reference works in psychiatry.

DYER.

PUBLICATIONS RECEIVED

J. B. LIPPINCOTT COMPANY, Philadelphia and London, 1920.

International Clinics, Volume 2, thirteenth series.

Diagnosis and Treatment of Brain Injuries, by William Sharpe, M. D.

W. B. SAUNDERS COMPANY, Philadelphia and London, 1920.

Human Parasitology, by Damaso Rivas, M. D.

The Duodenal Tube, by Max Einhorn, M. D.

WILLIAM WOOD & COMPANY, New York, 1920.

Epidemiology of Tuberculosis, by George E. Bushnell, Ph. D., M. D.

CHARLES E. MERRILL COMPANY, New York and Chicago, 1920.

Healthy Living, Books One and Two, by Charles-Edward A. Winslow, D. P. H.

PAUL B. HOEBER, New York, 1920.

Epidemic Encephalitis, by Frederick Tilney, M. D., and Hubert S. Howe, M. D.

BONI & LIVERIGHT, INC., New York, 1920.

General Introduction to Psychoanalysis, by Prof. Sigmund Freud, LL. D.

W. M. LEONARD, Boston, 1920.

Diseases of Children, by John Lovett Morse, M. D.

MASSON et CIE, Paris, 1920.

Chirurgie Réparatrice et Orthopédique, Volumes 1 and 2.

WASHINGTON GOVERNMENT PRINTING OFFICE, Washington, D. C., 1920.

U. S. Department of Agriculture, Service and Announcements, Supplement. Notices of Judgment Under the Food and Drugs Act, July 1, 7, 26 and 27.

Importation and Inspection of Tea.

Birth Statistics, 1918, Fourth Annual Report.

Public Health Reports, Volume 35, Nos. 28, 29, 30.

Food for Young Children, Farmers' Bulletin 717, Caroline L. Hunt.

Transactions of the American Pediatric Society, Thirty-first Session.

University of Iowa Studies. Studies in Medicine. Vol. 1, No. 6.

Report of the Board of Administrators of the Louisiana Hospital for Insane of the State of Louisiana.. Biennial period ending March 31, 1920.

Quarterly Bulletin Louisiana State Board of Health, Vol. 11, No. 2, June, 1920.

Biennial Report of the Board of Health for the Parish of Orleans and the City of New Orleans, 1918-1919.

Canton Hospital, Canton, China. Annual Report for the year 1919.

Report of the Soochow Hospital, Soochow, China, 1919.

Bulletins Nos. 2 and 3, of the New York Association for Medical Education.

American Medical Association.. Report of the Annual Congress on Medical Education and Licensure, and the Sixteenth Annual Conference of the Council on Medical Education.

REPRINTS.

An Improved Method for the Preparation of Primary Arsanilic Acid, by Harold C. Cheetham and John H. Schmidt.

Reprint and Circular Series of the National Research Council, Development of Research in the United States, by James Rowland Angell.

A New Germicide for Use in the Genito-Urinary Tract: "Mercurochrome-220," by Hugh H. Young, M. D., Edwin C. White, Ph. D., and Ernest O. Swartz, M. D.

MORTUARY REPORT OF NEW ORLEANS.

Computed from the Monthly Report of the Board of Health of the City of New Orleans, for July, 1920.

CAUSE.	White.	Colored.	Total.
Typhoid Fever	2	1	3
Intermittent Fever (Malarial Cachexia)			
Smallpox	1	1	2
Measles			
Scarlet Fever			
Whooping Cough	1	2	3
Diphtheria and Croup	2		2
Influenza			
Cholera Nostras			
Pyemia and Septicemia			
Tuberculosis	44	28	72
Cancer	38	4	42
Rheumatism and Gout		1	1
Diabetes		2	2
Alcoholism		1	1
Encephalitis and Meningitis	1		1
Locomotor Ataxia			
Congestion, Hemorrhage and Softening of Brain	24	12	36
Paralysis	4	2	6
Convulsions of Infancy	1		1
Other Diseases of Infancy	19	9	28
Tetanus		2	2
Other Nervous Diseases	7		7
Heart Diseases	33	34	67
Bronchitis			
Pneumonia and Broncho-Pneumonia	7	14	21
Other Respiratory Diseases	1	1	2
Ulcer of Stomach	3		3
Other Diseases of the Stomach	1		1
Diarrhea, Dysentery and Enteritis	14	15	29
Hernia, Intestinal Obstruction	2	5	7
Cirrhosis of Liver	4	2	6
Other Diseases of the Liver	1		1
Simple Peritonitis			
Appendicitis	8	3	11
Bright's Disease	25	11	36
Other Genito-Urinary Diseases	10	6	16
Puerperal Diseases	6	3	9
Senile Debility			
Suicide	3	1	4
Injuries	27	17	44
All Other Causes	28	27	55
TOTAL	317	204	521

Still-born Children—White, 20; colored, 26; total, 46.
Population of City (estimated)—White, 290,000; colored, 110,000; total, 400,000.
Death Rate per 1000 per annum for Month—White, 13.12; colored, 22.25; total, 15.63. Non-residents excluded, 13.65.

METEOROLOGIC SUMMARY (U. S. Weather Bureau).

Mean atmosphere pressure..... 30.05
Mean temperature..... 82
Total precipitation..... 6.20 inches
Prevailing direction of wind, southwest.